

Remarks/Arguments

Claims 1-65 are pending in this application. Claims 1, 13, 32, 36, 41, 47, 48, 49, 50, 54, 58, 61, 64 and 65 have been amended. Antecedent basis for each of these amendments may be found in the specification of the present application on page 4, lines 15-23.¹ Applicant has not entered any new matter into the record.

The Examiner has reiterated his rejections of all of the claims under 35 U.S.C. §§ 102(b), 102(e), and 103(a). The Examiner, however, directly responded to Applicant's previous response (remarks and amendments) and indicated that he feels the arguments made in support of patentability are not adequately reflected in the claim language. The Examiner repeatedly invited further amendments to address these concerns. A discussion, of Examiner's comments and the measures Applicant has taken to comply, follows.

The Examiner specified that Applicant's arguments were not adequately reflected in the claim language. The Examiner highlighted two areas that he contends require greater connection to the claim language; specifically, the Examiner states that:

- 1) there is no claim language that either a user or an administrator can *choose* a particular message from a list of associated messages; and

¹ *"It is still another advantage of the present invention to provide a web-based active virtual file system that can be configured to run programs, enforce constraints, send notifications, and perform other functions using predetermined rules that enable the active virtual file system to be used in workflow automation. It is yet a further advantage of the present invention to provide a web-based active virtual file system that can be programmed by the systems administrator to accomplish tasks needed for E-commerce and in setting up sophisticated intranet and Internet solutions, in which the active virtual file system provides triggers that automatically notify predetermined*

- 2) the claims do not state that the use of the invention, in a workflow automation environment, requires specific triggers, nor does it explain the relationship between the workflow automation, the file system, and the triggers and notification messages. The Examiner appears to relate these points back to the Crawford reference (U.S. Patent 5,771,354) and the Angal reference.

Applicant has addressed these specific concerns in the current set of amendments to the independent claims of this patent application. Although minor changes in wording exist, the amendments to Claim 1 are representative of these changes across all of the independent claims:

1. (Currently and Previously Amended) A computerized active file system, comprising:

- a memory circuit for storing data;
- a communications port that is in communication with a network, said communications port being configured to transmit and receive data over said network; and
- a processing circuit that is configured to control the flow of data between said memory circuit and said communications port;
- said processing circuit also being configured to control said memory circuit so as to operate as a file server;
- said processing circuit being further configured to automatically cause a notification message to be sent to said network upon the occurrence of at least one predetermined triggering event pertaining to the operation of said file server,
- wherein said at least one predetermined triggering event and its associated type and content of automatic notification message are configurable under the control of a system administrator utilizing an auto-notification computer program routine and
- wherein said automatic notification message may be configured by said system administrator to run programs, enforce constraints, send notifications and/or perform functions in response to said at least one predetermined triggering event to enable said file server to be used in workflow automation.

users having an interest in files that are being uploaded to or downloaded from the active virtual file system."
Applicant's Specification, page 4, lines 15-23.

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**Examiner's Contention that the Operator of the Auto-Notification Program is Not Clear
Nor that the Operator Has a Range of Choices with Regard to the Message**

Examiner contends that there is no claim that either a user or an administrator can *choose* a particular message from a list of associated messages. Applicant answers by entering the following amendment into claim 1 and its substantial equivalent into the other independent claims:

Wherein said at least one predetermined triggering event and its associated type and content of automatic notification message are configurable under the control of a system administrator utilizing an auto-notification computer program routine ... wherein said automatic notification message may be configured by said system administrator to run programs, enforce constraints, send notifications and/or perform functions in response to said at least one predetermined triggering event

Applicant specifies, via the current amendments in each independent claim, that it is a system administrator who is controlling the specification of the triggering event and the response (automatic notification message) to the event. This clearly serves to differentiate the present invention from Crawford which provides a non-configurable reaction to an event as the entire set of its functionality. Applicant, again, cites the portion of Crawford that the Examiner relied upon:

Crawford, Col. 43, lines 5-11

If the command is not allowed, a security violation is logged at the customer server router, a flag is set to tell the customer server router to deny the request and a violation message is sent to the controlling session.

Crawford discloses a specific, non-configurable response to a specific, non-configurable situation. If the command is not allowed, then a security violation is logged ... and a violation message is sent to the controlling session. The present application is not anticipated by Crawford's security program because the present application does offer flexibility as to the definition of the event/trigger and the notification message by the system administrator operating the auto-notification program. Thus, Crawford does not teach or suggest the method and system claimed in the present application.

Furthermore, Applicant also provides a specific list of notification events from which the system administrator may choose in setting up the chosen response for a particular trigger. This amendment answers the Examiner's rejection that no claim proposes to allow an administrator to "choose a particular message from a list of associated messages."

Examiner's Contention that There is Not Enough of a Connection Between the Workflow Automation, the File System, and the Triggers and Notification Messages

The Examiner contends the claims do not state that the use in a workflow automation environment requires specific triggers, nor does it explain the relationship between the workflow automation, the file system, and the triggers and notification messages. The Examiner contends

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these rejections are supported by both U.S. Patent No. 5,771,354 (Crawford) and U.S. Patent No. 5,999,978 (Angal). The Examiner further invites the Applicant to amend its claims to relate the workflow automation aspect of the invention back to the possible responses tripped by a triggering event. Applicant answers this invitation by entering the following amendments into Claims 1 and substantially equivalent amendments into the other independent claims:

Claim 1

- wherein said automatic notification message may be configured by said system administrator to run programs, enforce constraints, send notifications and/or perform functions in response to said at least one predetermined triggering event to enable said file server to be used in workflow automation.

These amendments specifically tie the elements of the automatic notification message and its triggering event to the workflow concept. Nothing in Angal suggests utilizing the trigger/action paradigm to create a workflow automation sequence as in the present application. Thus, Angal does not teach or suggest the method and system claimed in the present application. Both Angal and Crawford are directed toward a limited set of events (i.e., security violations) and reactions (grant, denial, message thereof). No system administrator is granted the ability to configure the event or the reaction, only whether such will take place.

Rejections by the Examiner

§§ 102(b/e)

The amendments and remarks made above in response to Examiner's specific suggestions complement the previous arguments for patentability made by Applicant in response

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to the rejections on the basis of §§102(b/e) and 103(a) that Examiner has reiterated in the present Office Action.

With regard to Examiner's §102(b/e) rejection on the basis of Crawford, the Examiner continues to contend that the following passage justifies this rejection:

Crawford, Col. 43, lines 5-11

If the command is not allowed, a security violation is logged at the customer server router, a flag is set to tell the customer server router to deny the request and a violation message is sent to the controlling session.

While Crawford discloses a specific response to a security violation in its file system, it does not disclose the configuration of events and messages by a system administrator to create a truly active file system that will react to a multitude of scenarios promulgated by end users and that may be further used to effect workflow automation by running programs, enforcing constraints, sending notifications and/or performing functions in response to said at least one triggering event. It does not teach the configuration of automatic notification messages by a system administrator as pointed out in the above amendments/remarks.

Likewise, Angal merely provides a particular instance of a trigger and notification (access request and notification thereof). While there is some limited ability to specify whether or not a specific accessor should receive a notification or not, like Crawford, the flexibility in this system is extremely limited. Angal specifies a very limited range of possible responses in the very section cited by the Examiner (Col. 9, Lines 54-58):

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An enforcement action, indicating whether the specified groups of users have or do not have access to the specified target set; in a preferred embodiment the enforcement action can be set to Deny with Response, Deny without Response, or Grant.

There is no suggestion of utilizing Angal to enable the active virtual file system to be used in workflow automation by running programs, enforcing constraints, sending notifications and/or performing functions in response to said at least one triggering event that is configured by a system administrator.

Thus, neither Crawford nor Angal teaches or suggest the method and system claimed in the present application. Therefore, Applicant requests reconsideration and allowance of the claims rejected on the basis of lack of novelty.

§ 103(a)

With regard to Examiner's §103(a) rejection, the Examiner continues to reject a plethora of claims under 35 U.S.C. § 103(a), as being obvious in light of U.S. Patent No. 5,771,354 (Crawford), U.S. Patent No. 5,999,978 (Angal) and a variety of other patents as to minor features of the present application.

Both Angal and Crawford are directed toward a limited set of events (i.e., security violations) and reactions (grant, denial, message thereof). There is no ability for a system administrator to configure the event or the reaction, only whether such will take place.

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Thus, neither Crawford nor Angal teaches or suggest the method and system claimed in the present application. Therefore, Applicant requests reconsideration and allowance of all of the claims in the present application.

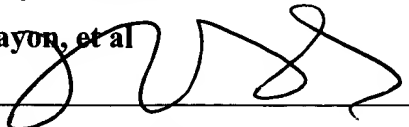
Conclusion

In light of the arguments and amendments made to the claims herein, it is respectfully submitted that the claims of the present application meet the requirements of patentability under 35 U.S.C. § 102(b); 102(e) and 103(a). Accordingly, reconsideration and allowance of these claims are earnestly solicited. Applicant's undersigned attorney has made a good faith effort to revise the claims so as to meet the patentability concerns raised by the Examiner in the Office Action. If the Examiner feels that any additional modifications are necessary prior to the issuance of a notice of allowance, he is invited to call the Examiner's undersigned attorney at the phone number given below so that those specific issues can be worked out.

Respectfully submitted,

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